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ABSTRACT OF THE DISCLOSURE

A drive circuit has a judgement circuit for judging whether the magnitude of the input video data resides in a linear region or the non-linear region of characteristic of liquid crystal transmittance. When the vide data resides within the linear region, some of the output gray-scale voltage for the LCD are generated by interpolation of adjacent two of the gray-scale voltages generated by a voltage generator. The reduced gray-scale voltage taps reduces the circuit scale and the test procedures for the drive circuit.